

EFFECTS OF LEGAL PENALTY CHANGES AND LAWS TO INCREASE DRUNKEN DRIVING CONVICTIONS ON FATAL TRAFFIC CRASHES*

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INCREASED NATIONAL CONCERN ABOUT DRUNK DRIVING IN THE 1980s

DURING the first half of the 1980s, the United States experienced an unprecedented emergence of concern about problems posed by drunken drivers. From 1980 to 1985 more than 400 chapters of local citizen groups concerned with the drunken driving problem were formed, organizations such as Remove Intoxicated Drivers and Mothers Against Driving Drunk.¹ According to surveys of national media indices there was a 50-fold increase from 1980 to 1983 in newspaper and magazine stories about drunken driving.¹ A national commission on the problem was formed by President Reagan, and more than 500 legislative changes were enacted across the nation to deter drunken driving, reaching a high point of 223 changes during 1985.²

Among the most common of the laws enacted were those raising the legal drinking age to 21. All states now have adopted that standard. Thirty states also adopted legislation making it illegal per se to drive with blood alcohol levels above 0.10, about 4-5 drinks in one hour on an empty stomach for a 155 pound person. More than 40 states now have per se legislation. Nearly half of the states implemented administrative per se provisions where licenses can be suspended before trial. In response to complaints by citizen groups, many of whose members had family members killed or injured in drunk driving crashes, many states also raised their penalties for drunken driving. Increased

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finer, longer license suspensions, jail sentences, and statutes concerning felony homicide under the influence were adopted in many states.³

This concern about drunken driving emerged after several years of traffic fatality increases nationwide from 44,525 in 1975 to 51,091 in 1980. Studies comparing blood alcohol levels of drivers in fatal crashes with those passing similar locations at similar times of day and day of week but not involved in crashes have consistently found drivers responsible for fatal crashes much more likely to have been drinking and drinking heavily.⁴ Extrapolating from these studies, a 1981 National Academy of Sciences report estimated that if no one drove a motor vehicle after drinking, traffic deaths in the United States would decline 24%, 11,000-13,000 annually.⁵ In 1982 53% of fatally injured drivers nationwide had been drinking.⁶ That same year 57% of traffic fatalities involved a driver or pedestrian who had been drinking.

EFFECTS OF ALCOHOL SAFETY ACTION PROGRAMS IN THE 1970S

In the 1970s, efforts to reduce drunk driving focused on apprehension and treatment. Less emphasis was placed on legal punishment. The U.S. Department of Transportation invested more than 88 million dollars in community Alcohol Safety Action Programs to accomplish these goals. Emphasis on rehabilitation of drunk drivers was adopted because of evidence that drivers in fatal crashes and most drivers arrested for driving while intoxicated had consumed large amounts of alcohol. It was believed that such high levels of consumption were unlikely for anyone but chronic heavy drinkers, many of whom were probably alcoholic. Data from follow-up studies of alcoholics also showed they were twice as likely as nonalcoholics to die in traffic crashes.

Unfortunately, the impacts of the programs varied.^{7,8} Studies comparing arrested drivers offered counseling and education with drivers given standard penalties reported little difference in subsequent rearrest and crash involvement. More recent studies have produced comparable results.⁹ When compared to non-Alcohol Safety Action Program control communities, 12/35 communities nonetheless had significant night fatal crash reductions; two had increases. During the five years of their operation, these programs were estimated to have prevented 500 fatal crashes, not primarily as a result of the education or treatment program but because drunken driving arrests increased. Police may have been more willing to arrest drunk drivers because they believed that arrested offenders were not as likely to be severely punished in communities relying heavily on rehabilitation and education.¹⁰

However, even if the education and treatment programs had been highly

successful, it is unlikely that they would have by themselves made a major impact on reducing drunken driving fatalities. Only a small percentage (less than 10%) of drivers involved in fatal crashes have been previously arrested for driving while intoxicated,¹⁰ in part because the level of drunken driving enforcement is low. Survey data collected in New England suggests that even though arrests increased during the 1980s, drunk drivers are arrested only two or three times for drunken driving per 1,000 drunken driving trips.¹¹ Indeed, the risk of arrest per drunken driving trip is only slightly higher than the risk of crash involvement (Table I).

Another reason is that people most likely to drive after heavy drinking and to be involved in fatal crashes are young male drivers.¹² Despite excessive drinking and erratic driving patterns, many of these young men have not been drinking and driving long enough to be apprehended by the police. Third, alcohol is only one of several reasons these drunk drivers are at greater crash risk. According to surveys in New England, people who drive after five or more drinks (compared to those who never drive after drinking) are more likely to engage in other risky behavior in traffic.¹³ They are nine or 10 times more likely to drive after marijuana or other drug use, twice as likely to speed 20 miles over the limit or to run red lights. They are one quarter as likely to wear belts, four times more likely to be ticketed for moving violations other than drunken driving, twice as likely in the previous year to have been involved in crashes and five times as likely to have been involved in crashes resulting in injury or death (Table II).

The failure of the Alcohol Safety Action Program rehabilitation and reeducation substantially to reduce fatal crashes and the lessening of penalties levied against drunk drivers may have fostered a sense among many citizens that society condoned drunk driving and was unwilling to punish offenders. Also because 20-40% of those who die in drunk driving crashes are people other than the drunk driver, many believed drunk drivers ought to be held accountable for their behavior through legal punishments, and that their accountability would also deter others from driving drunk. That may have stimulated the call for stiffer penalties and per se legislation to increase conviction during the early 1980s.

However, reviews of per se drunken driving laws and penalty increases in other countries, e.g., Britain, Canada, and France, have found that those laws were often followed by short-term declines in drunken driving deaths that typically decayed as the public realized police and court enforcement were not as intensive as originally anticipated.¹³ For that reason the Insurance Institute for Highway Safety in the early 1980s cautioned that "none of the

TABLE I. DRUNK DRIVING ENFORCEMENT IN NEW ENGLAND
1982-1985

	<i>1982</i> <i>N=3,314</i>	<i>1983</i> <i>N=3,340</i>	<i>1984</i> <i>N=3,248</i>	<i>1985</i> <i>N=3,282</i>
Stops after drinking/ 1,000 D.D. trips	11.1	16.1	21.1	33.1
Took breath test/ 1,000 D.D. trips	2.5	4.6	3.4	5.9
Tickets for DWI/ 1,000 D.D. trips	1.0	2.0	2.0	2.8
Accidents after drinking/ 1,000 D.D. trips	2.1	2.5	3.0	2.1
D.D. trip=trip after 5+drinks				

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TABLE II. SURVEY OF ADULT DRIVERS IN MASSACHUSETTS
1985,1986
CHARACTERISTICS OF PEOPLE WHO DROVE AFTER HEAVY DRINKING
(5+DRINKS)

	<i>0-7</i> <i>N=1758</i>	<i>After heavy drinking</i> <i>1-3</i> <i>N=88</i>	<i>4+</i> <i>N=30</i>
<i>Past month</i>			
Drove after marijuana use	4%	18%	41%
Other drugs	3	4	27
Wore seat belts 90 % of the times	43	22	11
<i>Past week</i>			
Ran a red light	8	12	18
Speed 20 mph over limit	15	39	32
<i>Past year</i>			
Driving violation			
Other than drunk driving	11	29	40
Driver in crash	9	19	19
Driver in crash Resulting in injury	1	2	5
<i>Strongly oppose</i>			
Seat belt law	18	26	26
Safe roads act (drunk driving law)	9	17	70
55 MPH speed limit	11	12	35

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countermeasure approaches devised and implemented to deter these drivers has been found to have a permanent influence on reducing deaths from crashes of alcohol impaired drivers.”¹³

THE NATIONAL DRUNKEN DRIVING FATAL CRASH EXPERIENCE,
1980-86

Researchers interested in mapping trends in the levels of drunken driving and fatal crashes are hampered by incomplete testing of drivers in fatal crashes. If all drivers in fatal crashes were blood alcohol tested, one could determine whether the number of fatal crashes involving intoxicated drivers rises or falls over time relative to other fatal crashes. That would provide a reasonable assessment of whether drunken driving crashes were increasing or falling relative to other fatal crashes. Unfortunately, in 1980 only 15 states tested 80% or more of fatally injured drivers and fewer than half of the drivers in crashes causing death were themselves fatally injured. By 1985 the total had risen to 32.¹⁰

In the absence of comprehensive reporting, researchers have often compared single vehicle night fatal crashes or all night fatal crashes to day time fatal crashes. In states with comprehensive testing, single vehicle night fatal crashes and night fatal crashes are much more likely to involve intoxicated drivers than day time fatal crashes, two thirds vs. one third. Therefore, it is believed that if single vehicle night fatal crashes decline more than daytime fatal crashes, that would reflect greater declines in drunken driving crashes than other crashes.¹⁵

The U.S. Department of Transportation also developed a system to project from the best reporting states to the entire nation the numbers of alcohol-related fatalities.¹⁶

Results from both approaches to the problem of tracking alcohol involvement in fatal crashes reveal similar results from 1980 to 1986.

Both approaches suggest marked declines in fatal crashes involving alcohol from 1980 to 1985, but increases from 1985 to 1986. From 1980 to 1985 nationwide fatal crashes in the United States declined 13% from 45,284 in 1980 to 39,168 in 1985. Single vehicle night fatal crashes, those most likely to involve intoxicated drivers, declined even more, 20%, from 18,277 to 14,603. Among young drivers aged 15-19 declines from 1980-85 were even more pronounced: overall fatal crash totals declined 26% from 9,855 to 7,091, and single vehicle night fatal crashes declined more, 34% from 3,693 to 2,408 (Figures 1 and 2).

However, from 1985 to 1986 fatal crashes increased 5% (up 1,894) and

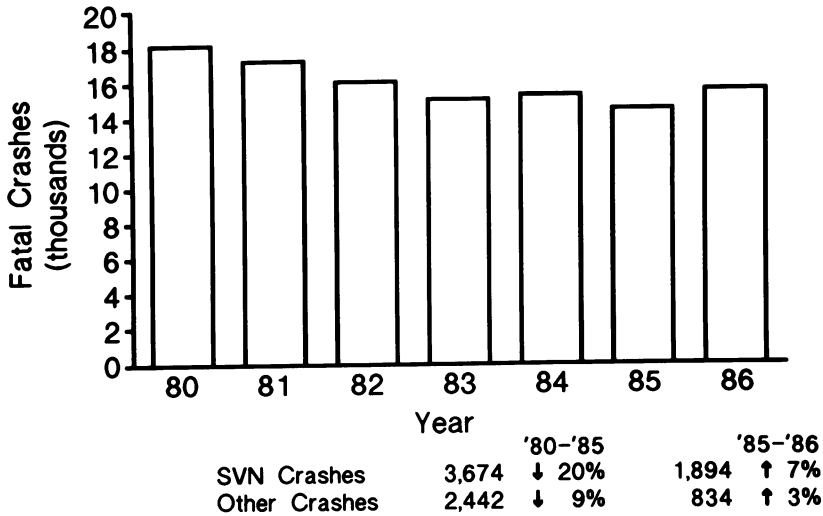


Fig. 1. Single-vehicle nighttime fatal crashes nationwide, all ages, 1980-1986. Reproduced by permission from Hingson, R., Howland, J., Morelock, S., and Heeren, T.: Legal interventions to reduce drunken driving and related fatalities among youthful drivers. *Alcohol Drugs Driving* 4:87-98, 1988.

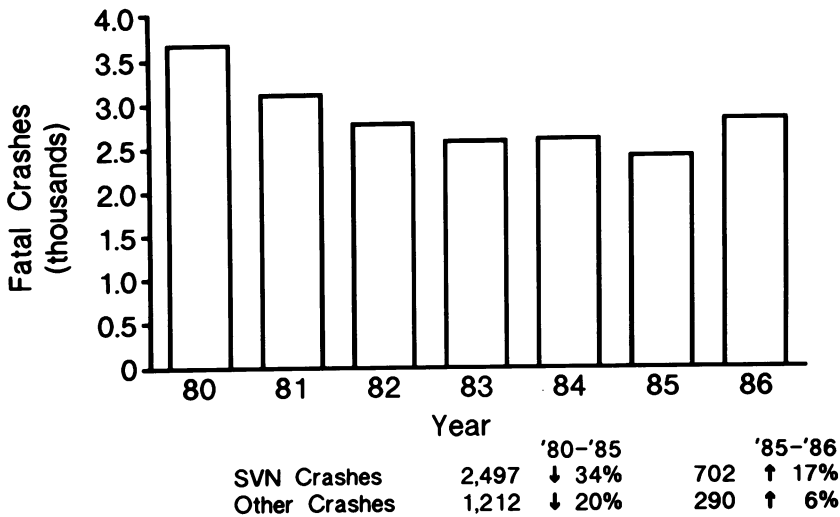


Fig. 2. Teen single-vehicle nighttime fatal crashes nationwide, 1980-1986. Reproduced by permission from Hingson, R., Howland, J., Morelock, S., and Heeren, T.: Legal interventions to reduce drunken driving and related fatalities among youthful drivers. *Alcohol Drugs Driving* 4:87-98, 1988.

single vehicle night fatal crashes rose at a 7% increase (up 1,060). Among teens, fatal crashes increased 10%, and single vehicle night fatal crashes increased 17%, up 412.

By 1985 the numbers of states with comprehensive alcohol testing of fatally injured drivers reporting increased to 32. The numbers of fatally injured drivers in those 32 states with blood alcohol levels of 0.10 or higher increased from 4,884 to 5,211 from 1985 to 1986, a 7% increase. The numbers of drivers killed in other crashes rose only 3%. Among teenaged 15-19 year old drivers the numbers of fatally injured drivers with blood alcohol content above 0.10 increased 12% from 478 to 534, while the number of other fatally injured teen drivers increased at half that rate, 6%. According to the U.S. Department of Transportation, after three years of decline nationwide, alcohol-related fatalities rose 7% from 1985 to 1986 while other fatalities rose 3%.⁶

Of note, the U.S. Centers for Disease Control in Atlanta conducted annual random digit dial telephone surveys of 900–1,500 adults in each of 15 states in 1984, 1985, and 1986. In 14 of 15 the percentages reporting driving after drinking too much declined from 1984 to 1985, but from 1985 to 1986 there were increases in 10 of the 15 states.^{17,18}

REASONS FOR THE INCREASES AND DECLINES

Several explanations can be offered for the declines in fatal crashes involving alcohol from 1980 to 1985 and subsequent increases from 1985 to 1986. One explanation for the decline in fatal crashes in the early 1980s was the economic recession experienced at that time. It has been argued that economic downturns reduced discretionary income available to young drivers, limiting their ability to drive recreationally or purchase alcohol, thereby reducing their fatal crash involvement.¹⁹ While a plausible explanation for the declines in fatal and single vehicle night fatal crashes of the early 1980s and for the greater declines among teens than adults, the continued declines in those groups after 1982 when the economic recession gave way to prosperity seems directly to contradict the economic hypothesis. If the economy were the sole force in operation, fatal and single vehicle night fatal crashes, particularly among teen drivers, should have begun to increase prior to 1986.

A second explanation is that many states raised their legal minimum alcohol purchase ages during the early 1980s. The preponderance of evidence concerning the effectiveness of raising the legal drinking age suggests that this measure reduced fatal crashes 10-15% among targeted teenaged drivers relative to states not raising the drinking age. However, crash reductions have been variable from state to state (Figure 3).²⁰⁻²³

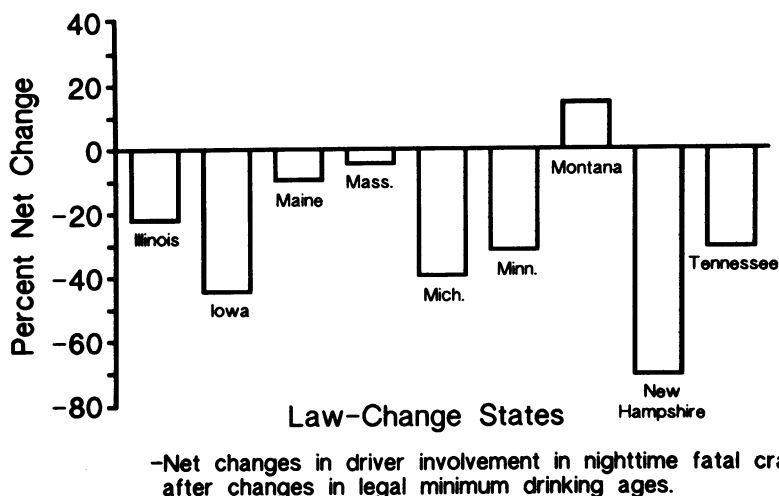


Fig. 3. Effects of drinking age increases on night fatal crashes in target areas. Reproduced by permission from Williams, A.F., Zador, P.L., Harris, S.S., and Karpf, R.S.: The effect of raising the legal minimum drinking age on involvement in fatal crashes. *J. Legal Studies* 12:69-79, 1983.

Few studies of legal drinking age increases or other drunk driving laws have examined the full process of behaviors between passage of these laws and fatal crash outcomes (Figure 4). Whether the laws were followed by increased police enforcement, changes in actual alcohol availability, locations and amount of drinking, or the frequency that teens drive after drinking was not routinely explored. In Massachusetts, when the drinking age was raised from 18 to 20 the proportion of teens who purchased alcohol at liquor stores and bars dropped significantly from 44% to 27% and 19% to 16%, respectively, but the portion who had others purchase for them doubled 21% to 43%. Enforcement varied widely by community. In communities of 100,000 inhabitants or more, 40% of teens sought to purchase alcohol after the law; fewer than 10/1,000 teens were arrested. Despite low levels of enforcement, the proportion of teens who report driving after drinking declined significantly, 51% to 40%, relative to a comparison state and night fatal crashes among 18-20 year olds declined significantly.²⁵ Whether variability in effects from state to state is a function of the level of enforcement warrants consideration.

By the end of 1986 all but one state had raised their drinking ages to 22³ yet teen-age fatal crashes rose sharply, particularly single vehicle night time crashes in 1986. That suggest either efforts are needed to enforce those laws more actively or that new countermeasures focused on teen-age drunk driving need to be devised and implemented.

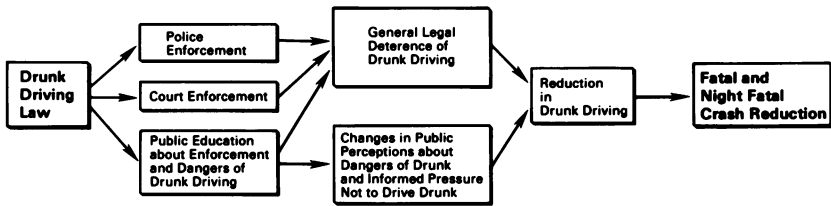


Fig. 4. Potential process of change after a drunk driving law. Reproduced by permission from Williams, A.F., Zador, P.L., Harris, S.S., and Karpf, R.S.: The effect of raising the legal minimum drinking age on involvement in fatal crashes. *J. Legal Studies* 12:169-79, 1983.

A third plausible explanation for the decrease in fatal crashes that may help explain subsequent increases is that the public focus on the drunk driving problem and debate about drunk driving legislation increased dramatically in the early 1980s and reduced drunk driving. But the public focus has been difficult to sustain. The numbers of news stories about drunken driving in the national press rose 50-fold from 1980 to 1983 and 1984 but then declined in subsequent years (Figure 5).¹ A similar pattern was observed in the numbers of new chapters of local citizen groups concerned about the drunken driving problem. Numbers of new laws peaked in 1985.

It is clearly possible that the new laws and penalties deterred drunken driving, but it is also possible that discussion of the laws and the dangers of drunk driving that preceded those laws stimulated informal social pressure not to drive drunk. Evidence from an evaluation of a Massachusetts 1982 drunken driving law revealed that even before a drunken driving law passed there, reports of drunken driving declined in citizen surveys, and fatal crashes declined, particularly night fatal crashes (Figure 6).²⁵ Two statewide surveys conducted one year apart, prior to a 1982 drunk driving law, revealed that the proportion of persons who reported driving after five or more drinks in the prior month declined significantly from 14% to 11%. The decline occurred the year prior to the law, even though the percentages of Massachusetts residents who thought Massachusetts laws were adequately enforced declined from 26% to 17%, and who thought courts would convict drunk drivers from 35% to 30%, respectively. During that same year the Presidential Commission on Drunken Driving was established and then Massachusetts Governor King convened a task force which held highly publicized hearings across the commonwealth about the drunken driving problem.

According to a monitoring of news stories in the *Boston Globe*, the paper with the largest statewide circulation, articles about drunken driving peaked during 1982, the year the law was passed. Public discussion about the prob-

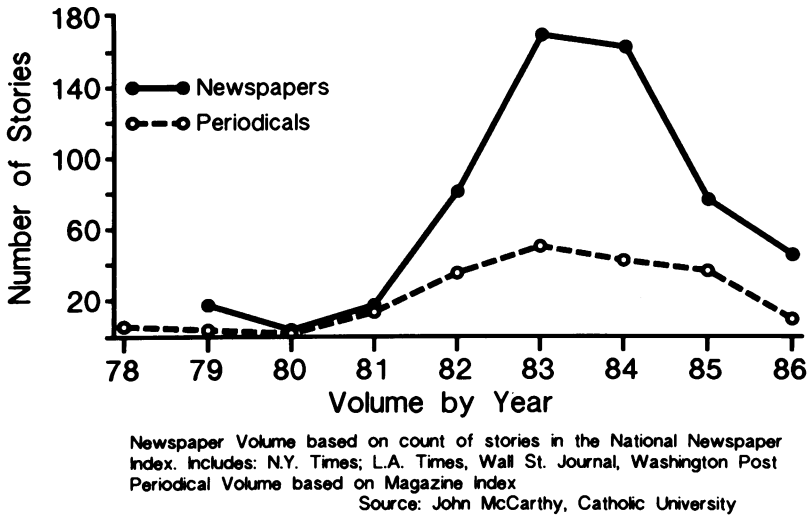


Fig. 5. Volume of national newspaper and periodical coverage of drunk driving, by year. Reproduced from McCarthy, J.D., Wolfson, M., Baker, D.P., and Mosakowski, E.: The Founding of Social Movement Organizations: Local Citizens Groups Opposing Drunken Driving. In: *Ecological Models of Organizations*, Carroll, G. R., editor. Cambridge, MA, Ballinger.

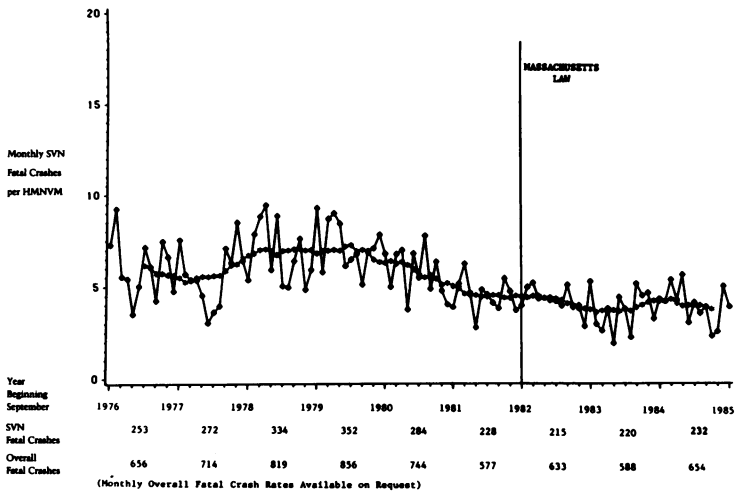


Fig. 6. Massachusetts fatal single-vehicle nighttime (SVN) crashes per nighttime vehicle miles traveled and annual fatal and SVN fatal crash frequencies, 1976-85. Note: Smoothed curve is a 12-month moving average. Reproduced by permission from Williams, A.F., Zador, P.L., Harris, S.S., and Karpf, R.S.: The effect of raising the legal minimum drinking age on involvement in fatal crashes. *J. Legal Studies* 12:169-79, 1983.

lem may have created informal pressure not to drive drunk. In Massachusetts from 1982 to 1983 the proportion of drivers who said they would not care if their best friend learned they had been arrested for driving drunk declined from 25% to 12%. That suggests that media attention and public discussion about the drunken driving problem can have an independent effect on the drunken driving.

But as noted above, nationwide public discussion of drunk driving seems to have waned after 1984, and that may have contributed to a relaxation of informal social pressure not to drive after drinking. Today's young teen-aged drivers were not driving during the early 1980s when media attention and local activity about drunken driving peaked, and hence they may not have been exposed to intense media attention and debate about the problem. Teen-aged drivers, because of lack of drinking experience and driving experience, may be most vulnerable to crash if they drive after drinking. Yet new cohorts of teen-age drivers are now entering the driving pool, and seem to be adopting practices that increase their fatal crash risk.

A fourth reason for the declines in fatal crashes during the early 1980s was that the numerous criminal and administrative *per se* laws passed and penalty increases made the public more likely to believe that drunk drivers arrested by the police would be convicted and punished. In the United States *per se* laws have been studied in Minnesota, Delaware, Iowa,²⁶ Oregon,²⁷ and New Mexico.²⁸ Though these analyses did not incorporate comparison areas without *per se* laws, they all reported fatal crash reductions following implementation of those laws.

However, the increase in alcohol-related fatal crashes in 1986 may in part have resulted from a diminution in the public's belief in the likelihood that drunk drivers will be stopped by the police. Many community studies in the United States and elsewhere indicate that increases in police enforcement can reduce fatal crashes.²⁹⁻³² In the New England states, though the proportions who thought drunken drivers would be stopped by the police increased from 1982 to 1985, still only one quarter of drivers thought it very likely that drunk drivers would be stopped by police. That is much lower than the proportions who thought that arrested drunk drivers would be convicted and punished. While the number of arrests per drunken driving trip reported by respondents increased sharply during that time period, the risk of arrest was still no higher than the risk of a crash. Police stop many more drivers than they breath test or arrest. It is doubtful that increasing penalties, even combined with procedures to insure high rates of conviction for arrested drivers, will result in long-term declines in drunken driving and fatal crashes if the driving public does not perceive a higher risk of apprehension.

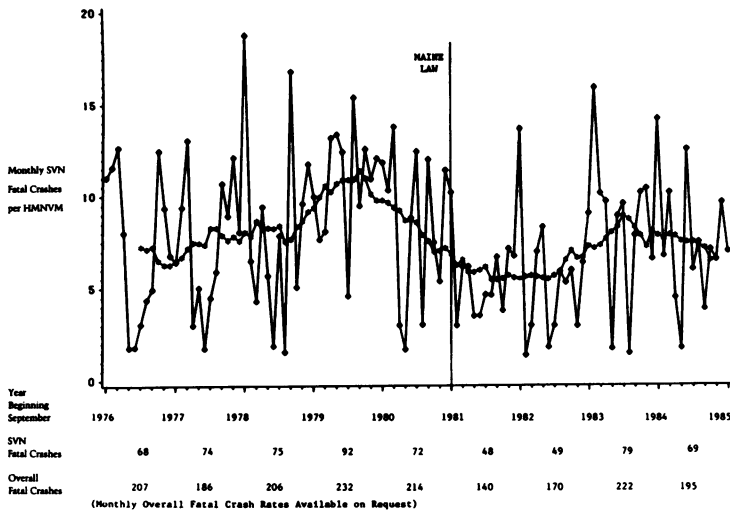


Fig. 7. Maine fatal single-vehicle nighttime (SVN) crashes per nighttime vehicle miles traveled, and annual fatal and SVN fatal crash frequencies, 1976-85. Note: Smoothed curve is a 12-month moving average. Reproduced by permission from Williams, A. F., Zador, P.L.; Harris, S.S., and Karpf, R.S.: The effect of raising the legal minimum drinking age on involvement in fatal crashes. *J. Legal Studies* 12:169-79, 1983.

Fifth, a study of a 1981 per se law in Maine revealed that attention to drunken driving was accompanied by a decline in speed enforcement.²⁵ There, a comprehensive series of penalty increases and legal changes to increase the conviction rate for drunk driving was followed by a two-year decline in a single vehicle night fatal crashes. During the first year the decline was significantly greater than the rest of New England. The greatest declines in drunk driving and fatal crashes were among drivers under age 25. State-wide telephone surveys before and after the law indicated that the proportion of drivers increased who made decisions not to drive because of excess drinking among all ages, but particularly among young male drivers, 30-54%. During the three years after the law, the proportions of drivers increased steadily who believed that drunk drivers would be convicted and receive punishment. However, during the same time, the proportion of drivers decreased who believed police would stop speeders. State police speed arrests declined from 30,000 to 19,000 annually and by the third postlaw year fatal crashes returned to prelaw levels. According to the U.S. Department of Transportation, speed monitoring equipment from the first to the third postlaw year the proportion of drivers traveling at 65 mph or more in 55 mph zones nearly doubled. When informed that the speed increases

coincided with the postlaw fatal crash increases there, state officials initiated a speed crackdown. Speed stops were doubled, citations increased by one third. During the next year fatal crashes declined 16% (Figure 7). These data document the interconnection of high risk traffic safety behaviors, and illustrate that attention to drunken driving may have its benefits compromised if attention to related behaviors such as speed is relaxed.

What happened in Maine may fortell national trends: because 38 states raised their speed limits in 1987. Given their slower reaction time and poorer sensory motor coordination, drunk drivers may be particularly vulnerable to crashes at higher speeds.

DISCUSSION

The United States is now at a potentially important crossroads in the efforts to reduce drunken driving. After several years of decline, drunk driving fatal crashes appear to have increased, particularly among teen-aged drivers. Raising the drinking age to 21 while an effective strategy to reduce drunk driving has already been adopted by all states. Numerous states have enacted per se legislation and penalty increases. Public media attention increased as these new laws were passed as did the formation of citizen groups to combat the drunken driving problem. But media attention and the passage of new laws may be declining somewhat.

What then can be done to sustain and build upon the drunken driving declines of early 1980s? First, there needs to be a refocusing of local and state attention to the problems posed by drunken drivers. It is important not to become complacent about drunken driving because dramatic inroads were made to deal with it in the early 1980s. Young teen-aged drivers, because of their inexperience in both drinking and driving are particularly vulnerable to crashes after drinking. Yet every year new drivers enter this high risk pool. Today's teen drivers may not have been concerned or attentive during the early 1980s when public discussion peaked concerning the drunken driving problem. It is important to keep emphasizing the dangers of drunken driving to new cohorts of drivers. That means education about the dangers posed by drunken driving cannot be relaxed.

Second, efforts are needed to increase police enforcement of drunken driving. The likelihood that drunk drivers will be arrested per 1,000 drunk driving trips is comparable to the risk of crash involvement, and in reality is quite low, 3-5/1,000 drunk driving trips. Numerous community studies have shown that increasing arrests for drunk driving can reduce alcohol related crashes.²⁹⁻³² But it is doubtful that general legal deterrence as a strategy to reduce drunk driving can have a major sustained impact if the likelihood of

arrest remains low. Even in states where new legal provisions convict very high percentages of arrested drunk drivers, the long-term impact of those changes may be compromised by minimal police enforcement.

Third, if police attention to drunken driving is increased, it should not be increased at the expense of related traffic safety behaviors such as speed and belt use. The Maine experience clearly demonstrates that failure to focus on interrelated behaviors can compromise the effects of a drunk driving law.

Fourth, it may not be realistic to expect dramatic increases in police arrests for drunk driving. Efforts should also target having the drunk driver encounter social disapproval for his actions. Educational messages such as "Friends don't let friends drive drunk" invoke a countermeasure that drunk drivers may be much more likely to encounter than police, and possibly more likely to respect, their peers.

During the early 1980s social disapproval of drunk driving increased and that may have been as important as the legal changes during that period in reducing drunk driving. The efforts to use social pressure to reduce drunken driving fatalities need not only focus on driving after drinking but other traffic safety behaviors as well, such as speeding or failure to wear safety belts, which are disproportionately engaged in by drunk drivers and heighten the risk of injury and death in drunk driving crashes. An underemphasized and poorly understood related behavior that should also be discouraged is riding with an intoxicated driver. Every year in the United States approximately 4,000 passengers in vehicles driven by drunken drivers are themselves killed. Agreeing to ride in a car with an intoxicated driver is not only dangerous, it symbolizes tacit approval of driving while intoxicated.

The development of community intervention programs patterned after those successfully used to reduce coronary heart disease risk factors also warrant research attention.^{33,34} They could have considerable potential in developing the kind of informal social pressure cited above. Programs that not only target messages at high risk age groups but all age and gender groups may be successful in building general social pressure to dissuade high risk groups from driving drunk. They may also build community institutions and support to finance the educational programs and added police enforcement needed to sustain long-term countermeasures to reduce drunk driving and related crashes.

SUMMARY

From 1980 to 1985 many citizen groups concerned with drunk driving were established, and media attention to the issue increased dramatically. During that period more than 500 legislative changes such as drinking age increases,

criminal and administrative per se laws, and drunk driving penalty increases were implemented. From 1980 to 1985 substantial declines in fatal traffic crashes involving alcohol occurred, but in 1986 those crashes began to increase again relative to other fatal crashes, particularly among teen-aged drivers. Insufficient police enforcement of the drunken driving laws, decreased attention to such related behaviors as speeding, decline in public attention to the drunk driving problem as measured by declining numbers of media stories and newly organized citizen groups may all have contributed to the increase in 1986. To sustain the declines in drunk driving achieved during the early 1980s, renewed media attention and citizen activism, increased police enforcement targeting drunk driving and such related behaviors as speeding and failure to use safety belts are needed. Efforts to stimulate informal social pressure not to drive drunk are also warranted. Legal changes to increase conviction and penalties for drunk drivers are insufficient by themselves to reduce drunk driving and fatal crashes.

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